



Doc. No. 98-C-037C1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : Examiner:
Brady, et al. :
Serial No.: 09/757,378 : Art Unit: 2841
Filed: January 09, 2001 :
: STMicroelectronics, Inc.
: 1310 Electronics Drive
: Carrollton, Texas, 75006

For: APPARATUS AND METHOD FOR REDUCING PROPAGATION DELAY IN A CONDUCTOR

PRELIMINARY AMENDMENT

Box Non-Fee Amendment
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In response to Notice of Missing Parts having a mailing date of February 13, 2001, please amend the above-identified application as follows:

CERTIFICATION UNDER 37 C.F.R. Section 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to _____, Assistant Commissioner for Patents, Washington, D.C. 20231 on April 12, 2001.

Mary L. Hiner
Signature

Mary L. Hiner
(Printed name of person certifying)

IN THE SPECIFICATION:

Page 1, please add the following:

- CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation application of prior application Ser. No. 09/127,050 filed July 31, 1998. -

Page 9, line 3, please replace "A-A" with "3B-3B".

IN THE CLAIMS:

Please delete Claims 7 and 20 .

Please amend the Claims as follows:

1. (Amended) An apparatus for decreasing the propagation delay time of an electrical signal transmitted from a source along a conductor in a circuit, the apparatus comprising:

5 a first conductor having a length extending from a first area of the circuit to a second area of the circuit and for carrying [the] an electrical signal, the first conductor having a first end electrically coupled to a source capable of providing the electrical signal; and

10 a second conductor located proximate the first conductor and extending substantially parallel and along the first conductor, the second conductor having a first end electrically coupled to the source [electrically coupled to the first conductor], and wherein the second conductor reduces the effective capacitance of the first conductor thereby increasing the speed of the electrical signal when transmitted along the first conductor.

2. (Amended) The apparatus in accordance with Claim 1 further comprising a third conductor located proximate the first conductor and extending substantially parallel and along the first conductor, the third conductor having a first end electrically coupled to the source [first conductor].

5. (Amended) The apparatus in accordance with Claim 3 further comprising a fourth conductor located proximate the first conductor and extending substantially parallel and along the first conductor, the fourth conductor electrically coupled to the source [first conductor].

8. (Amended) The apparatus in accordance with Claim [7] 1 wherein the first conductor and the second conductor each comprise metal.

9. (Amended) The apparatus in accordance with Claim 1 wherein the apparatus reduces the propagation delay of a clock signal when transmitted on the first conductor.

11. (Amended) An electrical conductor for increasing the speed of an electrical signal transmitted along the conductor in an integrated circuit, the conductor comprising:

5 a first conductor having a first end in a first area of the integrated circuit and a second end in a second area of the integrated circuit, and having a length extending from [a] the first area to the second area [of the integrated circuit to a second area of the integrated circuit];

10 a second conductor located proximate the first conductor and having a first end in the first area of the integrated circuit and a second end in a second area of the integrated circuit, and extending substantially parallel and along the first conductor from the first area to the second area; and

15 means for electrically coupling the first end of the first conductor to the first end of the second conductor, and wherein the second end of the first conductor and the second end of the second conductor are not electrically coupled in the second area of the integrated circuit.

12. (Amended) The electrical conductor in accordance with Claim 11 further comprising:

a third conductor located proximate the first conductor and having a first end in the first area of the integrated circuit and a second end in a second area of the integrated circuit, and extending substantially parallel and along the first conductor from the first area to the second area; and

means for electrically coupling the first end of the first conductor to the first end of the third conductor, and wherein the second end of the first conductor and the second end of the third conductor are not electrically connected in the second area of the integrated circuit.

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14. (Amended) The electrical conductor in accordance with Claim 12 wherein the coupling of the first conductor to the second conductor and to the third conductor decreases the effective capacitance of the first conductor thus decreasing the propagation delay time of [the] an electrical signal when transmitted along the first conductor from the first area to the second area of the integrated circuit.

15. (Amended) The electrical conductor in accordance with Claim 11 wherein the electrical coupling of the first conductor to the second conductor decreases the effective capacitance of the first conductor thus decreasing the propagation delay time of [the] an electrical signal when transmitted along the first conductor from the first area to the second area of the integrated circuit.

17. (Amended) A conductor for transmitting a clocking signal from a first area to a second area of an integrated circuit, the conductor comprising:

a first elongated conductive portion extending from the first area to the second area;

a second elongated conductive portion located proximate and space apart from the

5 first conductive portion and extending substantially parallel with the first conductive portion from the first area to the second area;

a third elongated conductive portion located proximate and space apart from the first conductive portion and extending substantially parallel with the first conductive portion from the first area to the second area;

10 means for electrically connecting the first conductive portion to the second conductive portion; [and]

means for electrically connecting the first conductive portion to the third conductive portion; and

15 a source located within the first area and coupled to the first, second and third conductive portions and capable of generating a clocking signal for transmission on the first conductive portion from the first area to the second area.

18. (Amended) The conductor in accordance with Claim 17 wherein the second conductive portion and the third conductive portion reduce the capacitive effects on the first conductive portion thereby reducing the propagation delay of the clocking signal when transmitted from the first area to the second area.

REMARKS IN RESPONSE

Claims 1-6 and 8-19 are pending in the application.

Claims 1-2, 5, 8-9, 12, 14-15, 17 and 18 have been preliminarily amended, as set forth above.

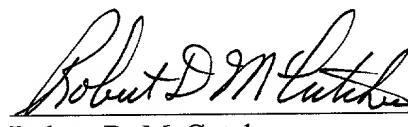
Applicants assert that the remaining Claims 1-6 and 8-19 in the Application are in condition for allowance, and respectfully request an early allowance of such Claims.

Applicants respectfully request the Examiner call the undersigned attorney at the below listed number if the Examiner believes it would be helpful in resolving any remaining issues.

Respectfully submitted,

Attorney for Applicants

By:



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